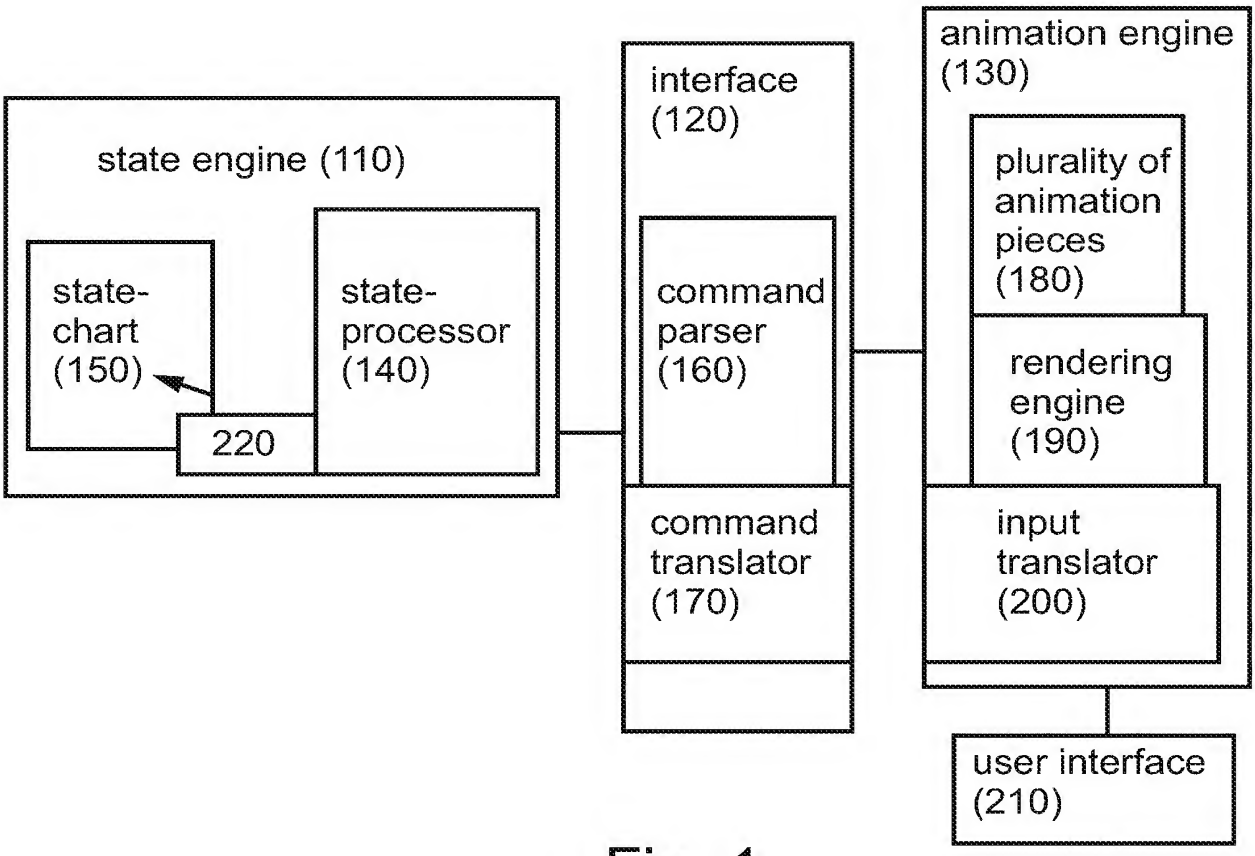

state engine (110)
state-chart (150)
220
state-processor (140)
interface (120)
command parser (160)
command translator (170)
animation engine (130)
plurality of animation pieces (180)
rendering engine (190)
input translator (200)
user interface (210)

Fig. 1

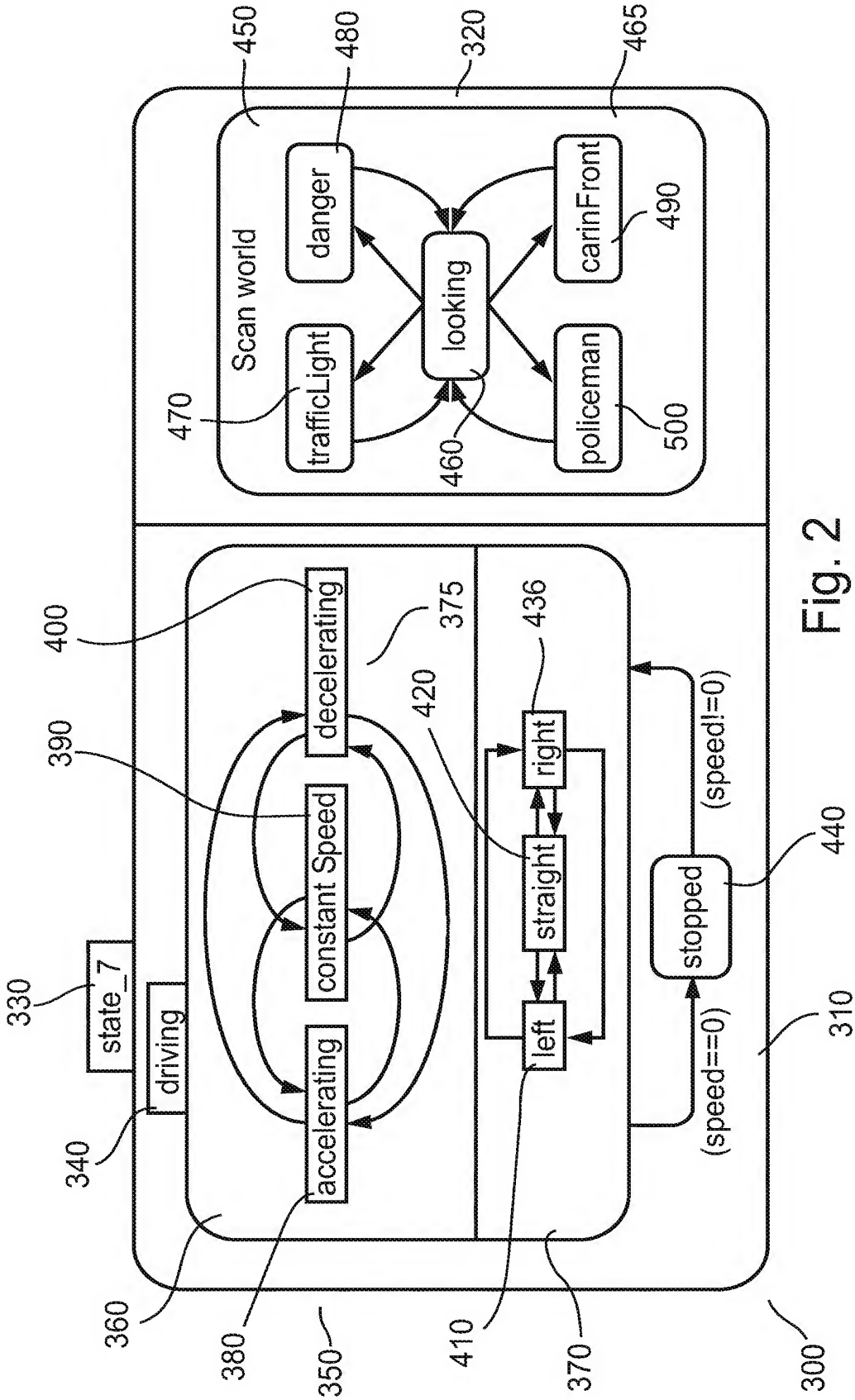

450
480
320
465
Scan world
danger
carinFront
looking
trafficLight
policeman
470
460
490
500
400
390
375
436
420
decelerating
constant Speed
accelerating
right
straight
left
stopped
(speed!=0)
(speed==0)
440
330
state_7
driving
340
310
360
380
350
410
370
300

Fig. 2

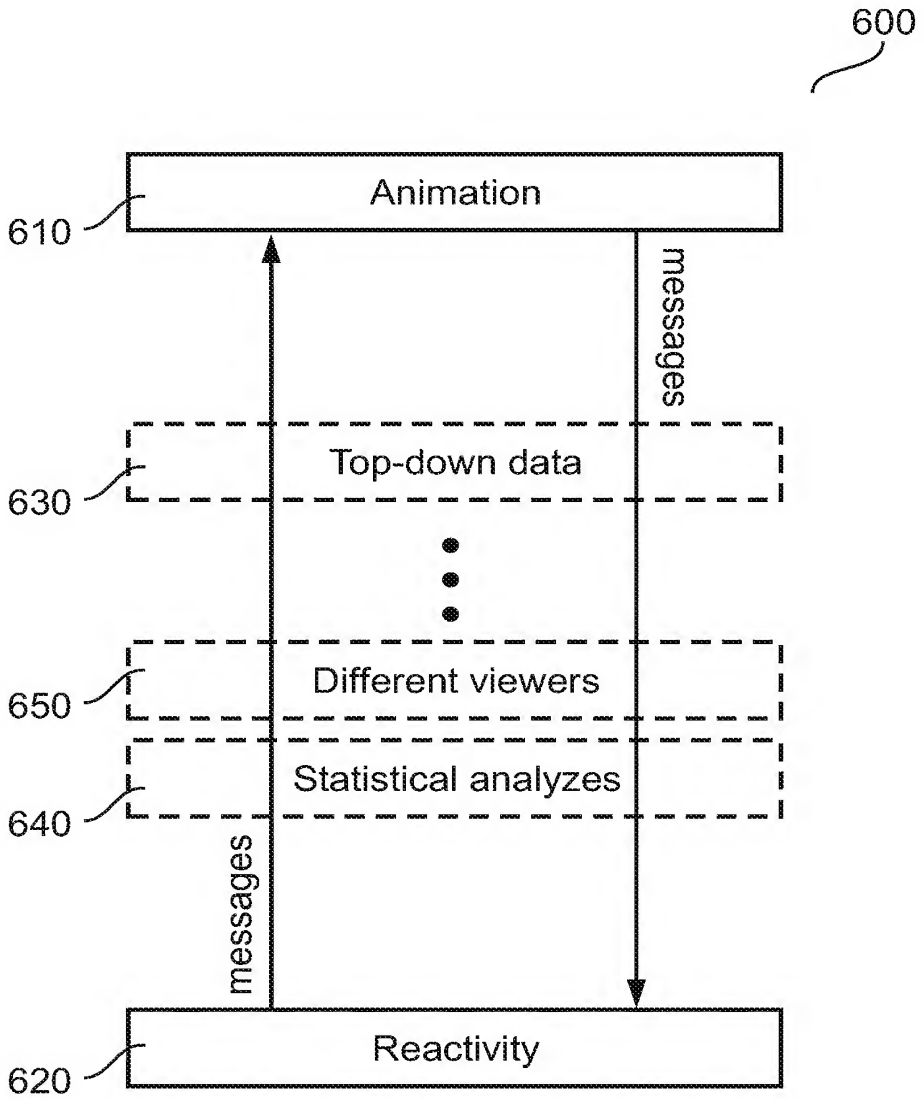

600
Animation
610
messages
Top-down data
630
Different viewers
650
Statistical analyzes
640
messages
Reactivity
620

Fig. 3

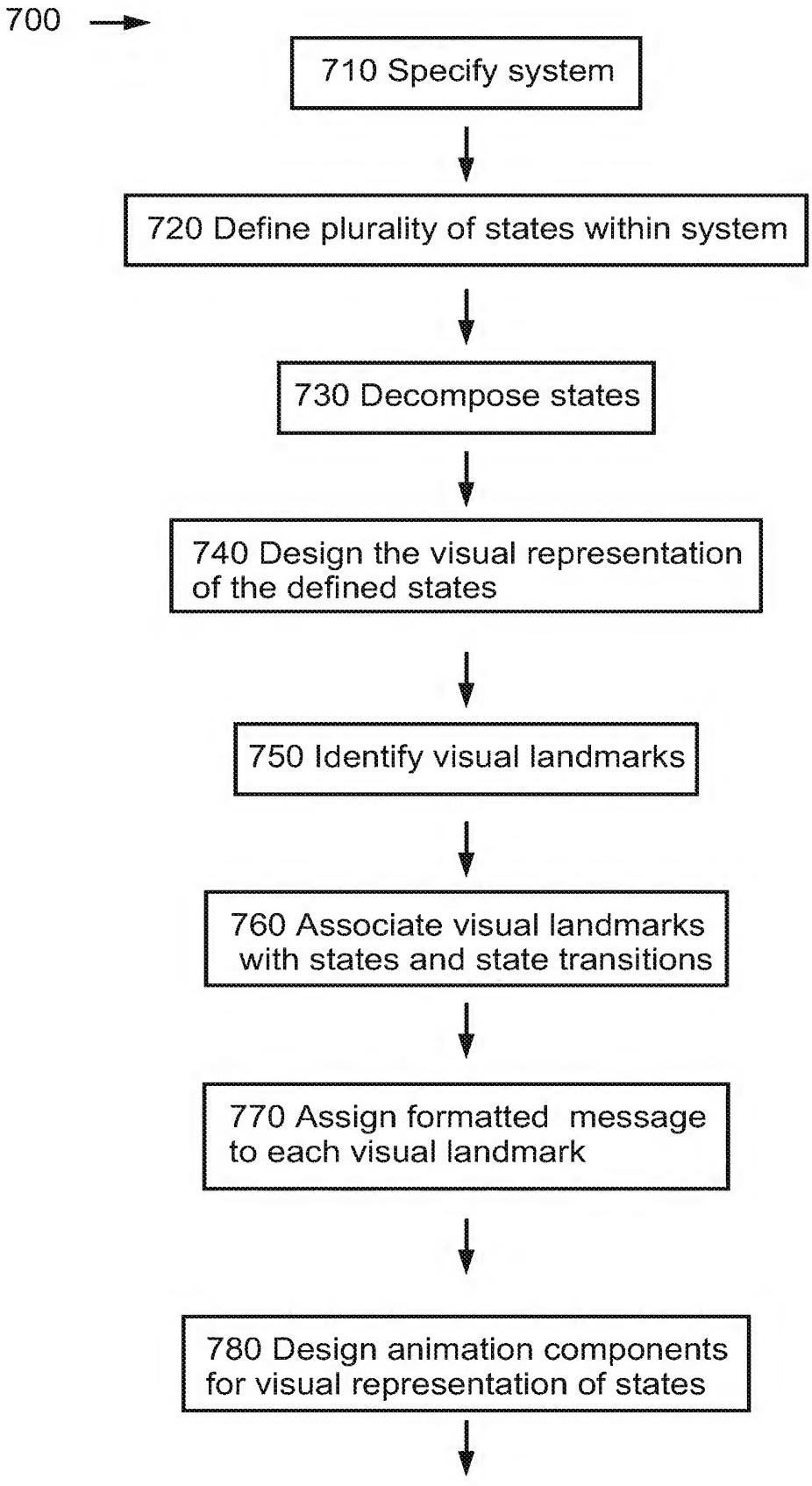

700
710 Specify system
720 Define plurality of states within system
730 Decompose states
740 Design the visual representation of the defined states
750 Identify visual landmarks
760 Associate visual landmarks with states and state transitions
770 Assign formatted message to each visual landmark
780 Design animation components for visual representation of states

Fig. 4

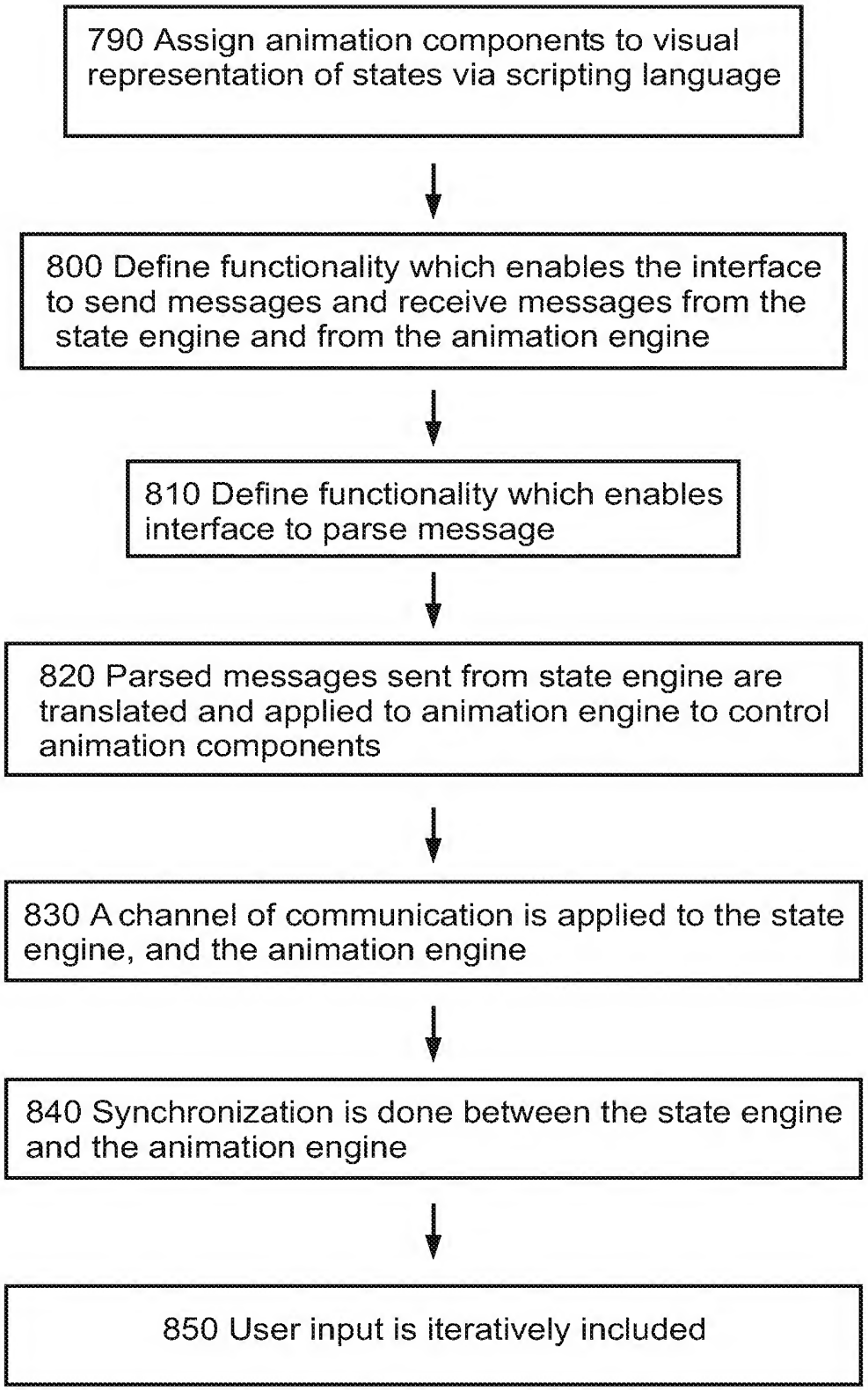

790 Assign animation components to visual representation of states via scripting language
800 Define functionality which enables the interface to send messages and receive messages from the state engine and from the animation engine
810 Define functionality which enables interface to parse message
820 Parsed messages sent from state engine are translated and applied to animation engine to control animation components
830 A channel of communication is applied to the state engine, and the animation engine
840 Synchronization is done between the state engine and the animation engine
850 User input is iteratively included

Fig. 4 (Cont.)

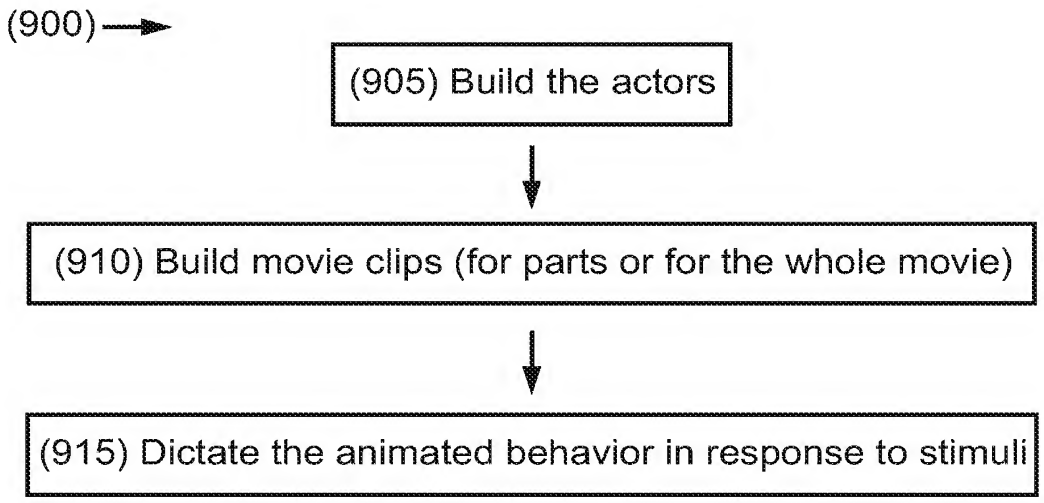

(900)
(905) Build the actors
(910) Build movie clips (for parts or for the whole movie)
(915) Dictate the animated behavior in response to stimuli

Fig. 5

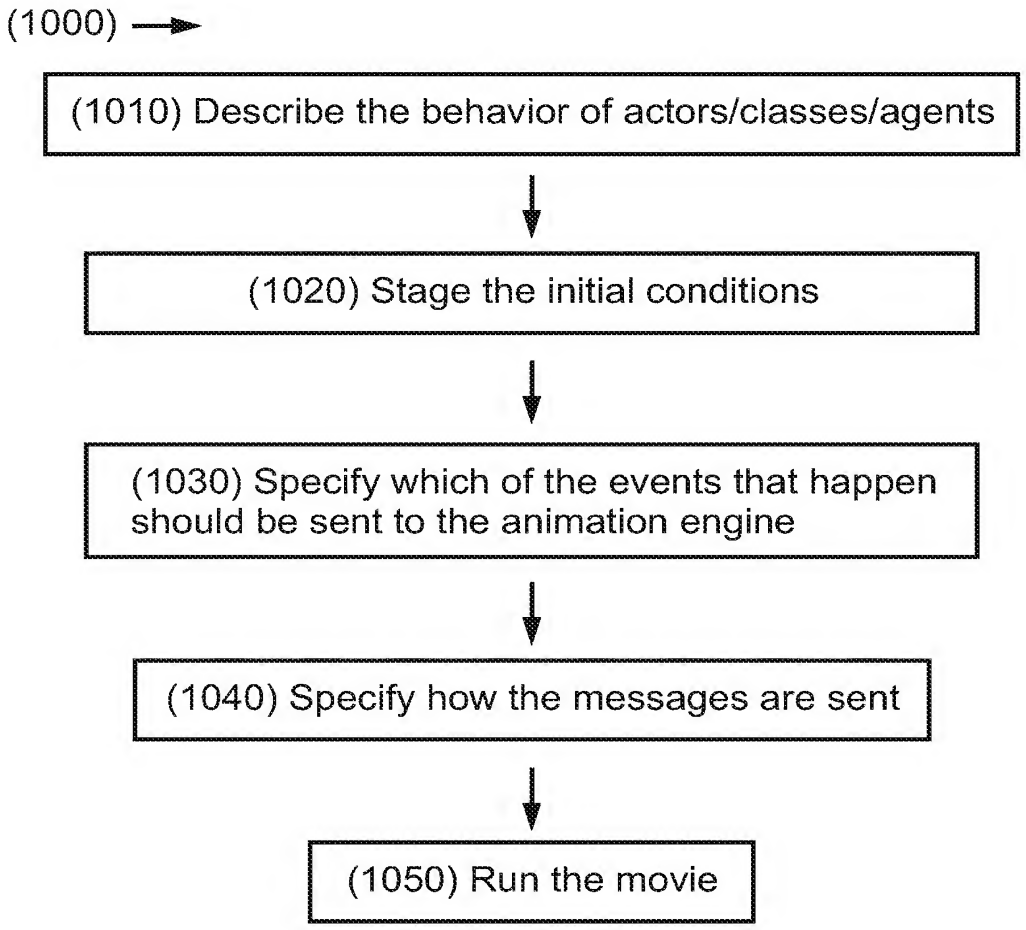

(1000)
(1010) Describe the behavior of actors/classes/agents
(1020) Stage the initial conditions
(1030) Specify which of the events that happen should be sent to the animation engine
(1040) Specify how the messages are sent
(1050) Run the movie

Fig. 6

Fig. 7b

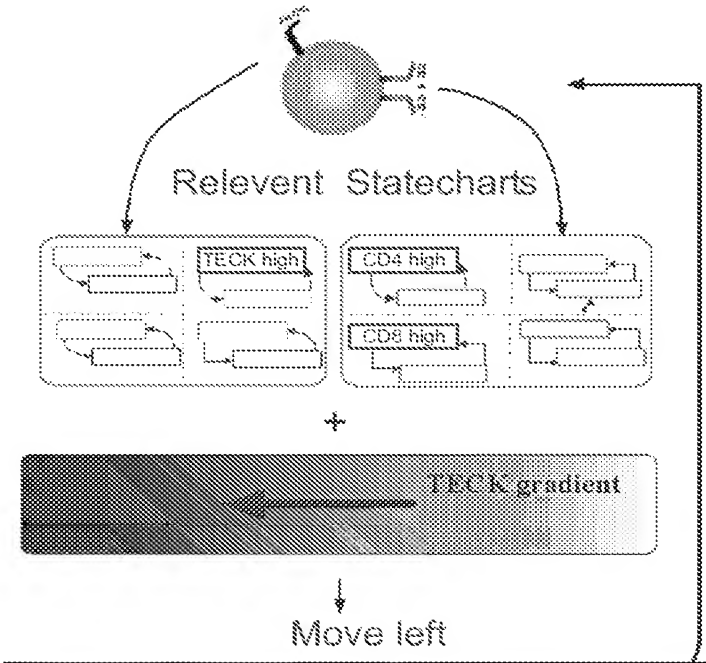


Fig. 7a

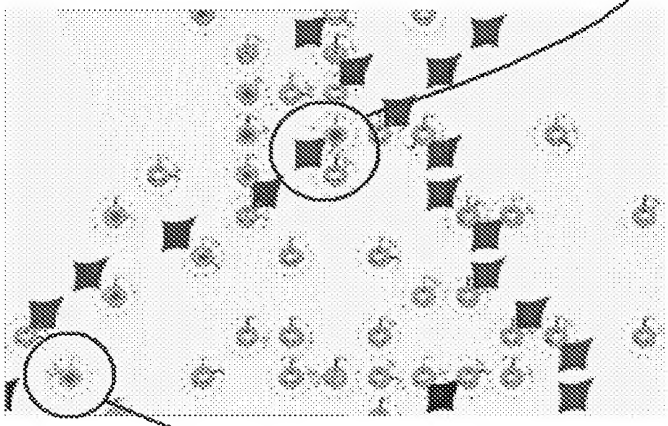
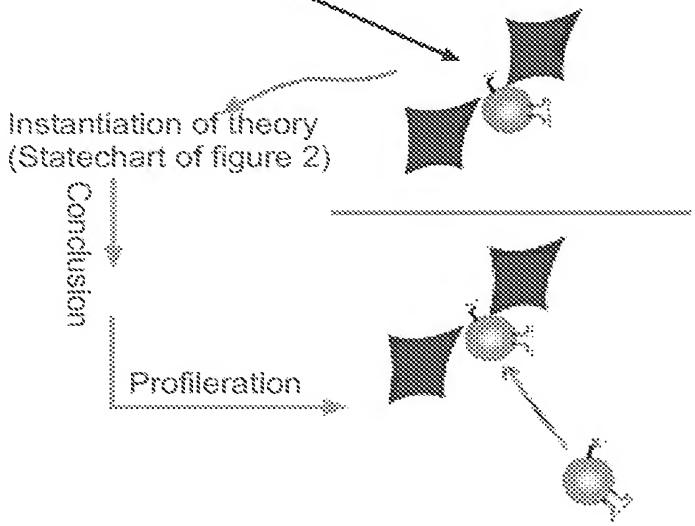


Fig. 7c



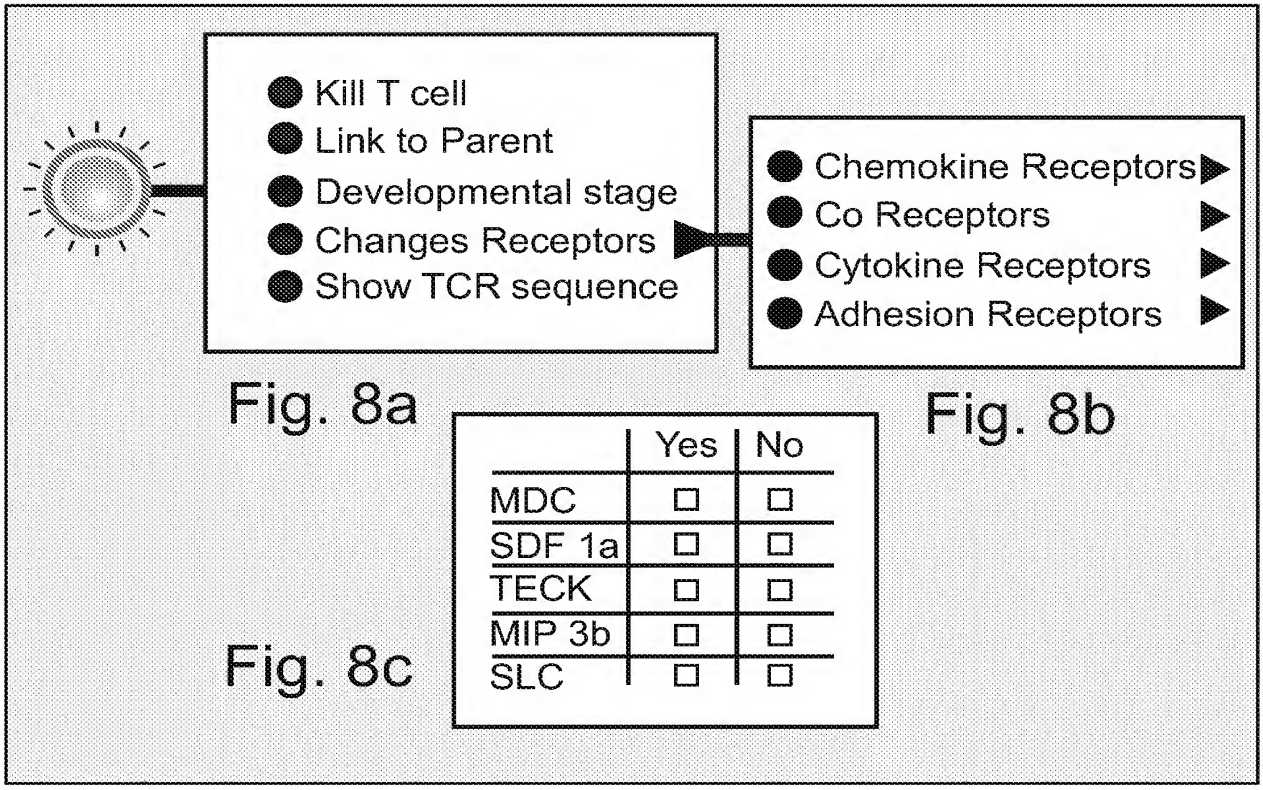


Fig. 8a

Fig. 8b

	Yes	No
MDC	☐	☐
SDF 1a	☐	☐
TECK	☐	☐
MIP 3b	☐	☐
SLC	☐	☐

Fig. 8c

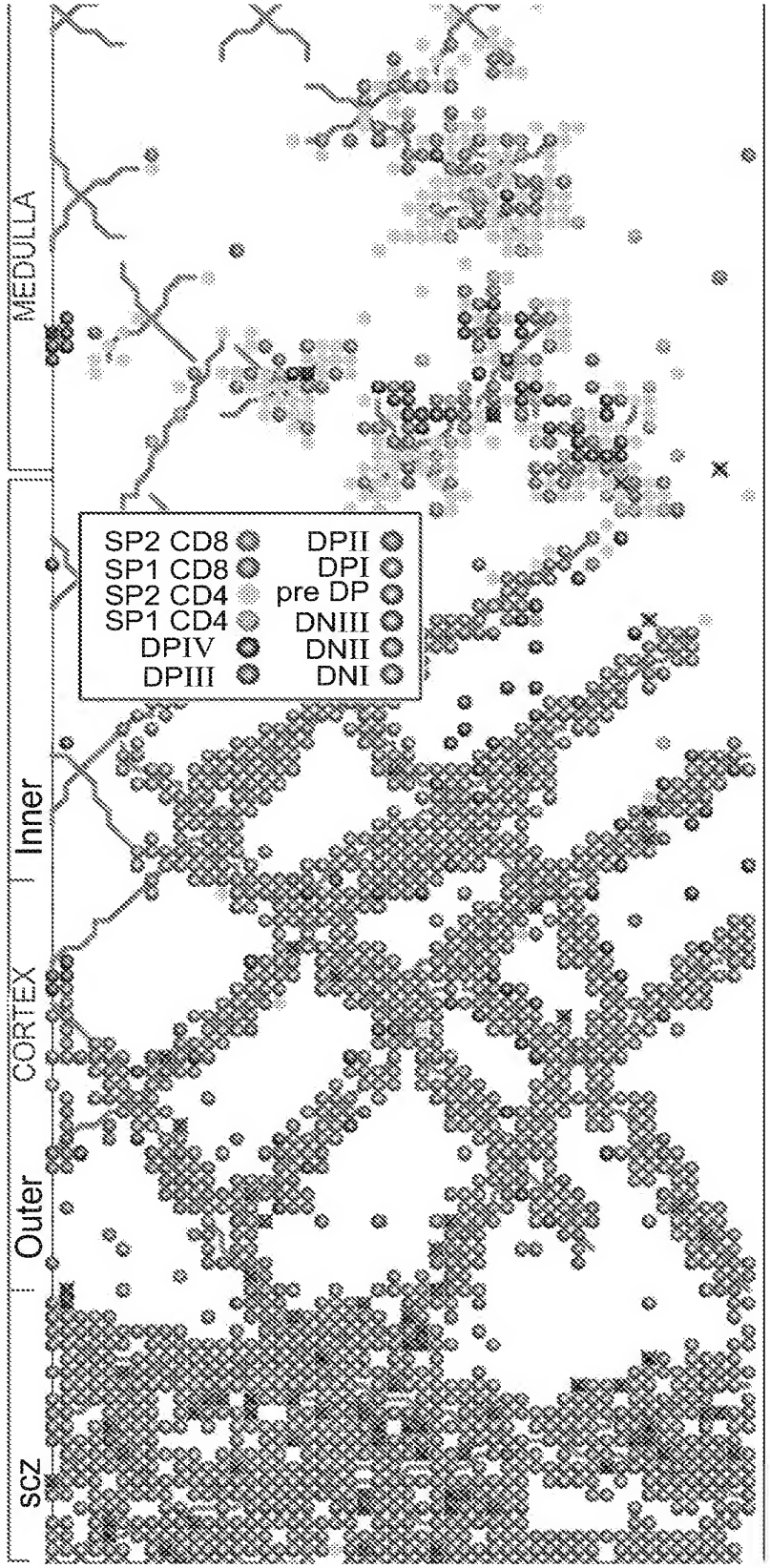

MEDULLA
CORTEX
Inner
Outer
scz
SP2 CD8
SP1 CD8
SP2 CD4
SP1 CD4
DPIV
DPIII
DPII
DPI
pre DP
DNIII
DNII
DNI

Fig. 9

Fig. 10a

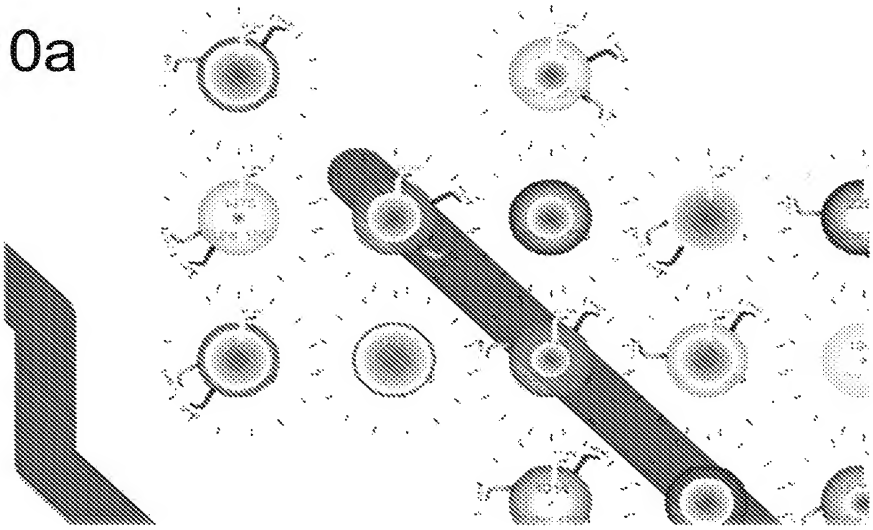
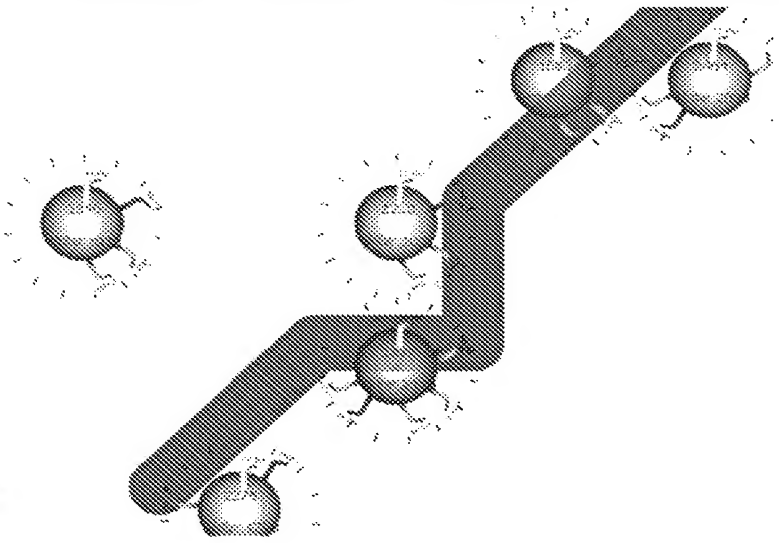


Fig. 10b



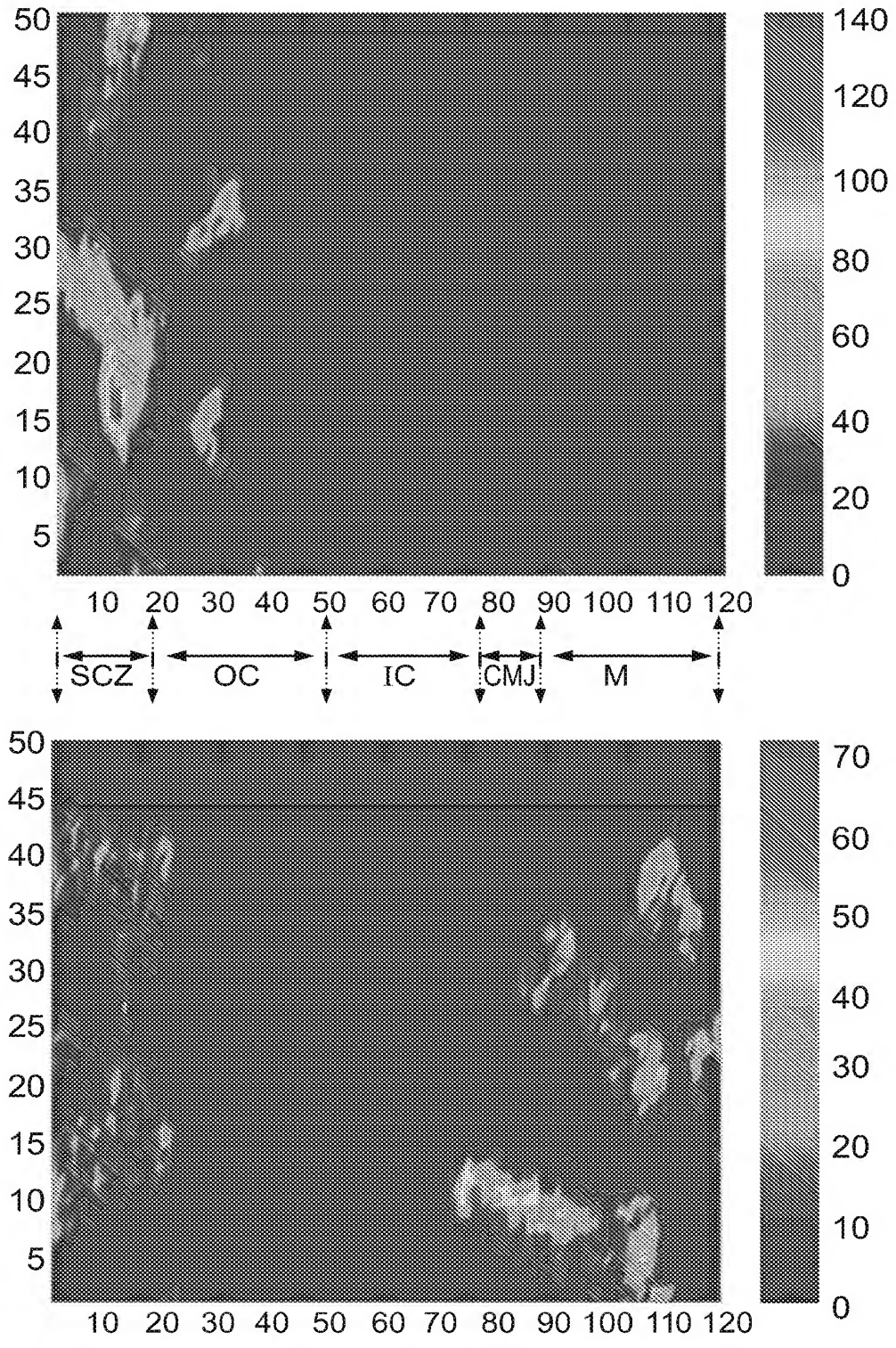

50
45
40
35
30
25
20
15
10
5
140
120
100
80
60
40
20
0
10 20 30 40 50 60 70 80 90 100 110 120
SCZ
OC
IC
CMJ
M
50
45
40
35
30
25
20
15
10
5
70
60
50
40
30
20
10
0
10 20 30 40 50 60 70 80 90 100 110 120

Fig. 11

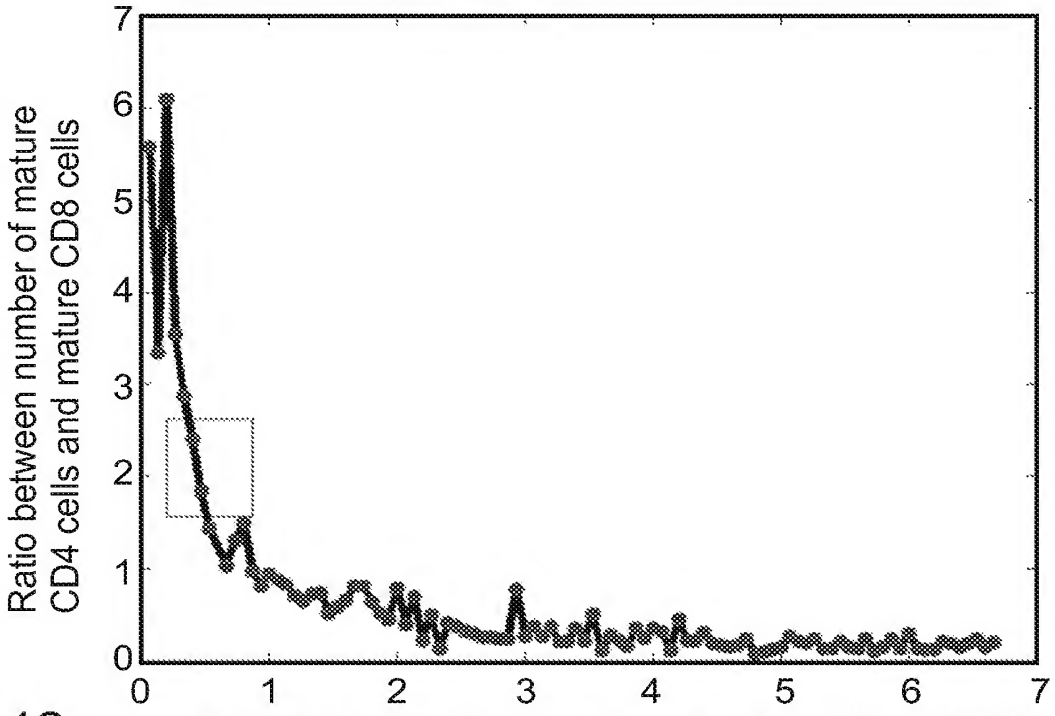


Fig. 12

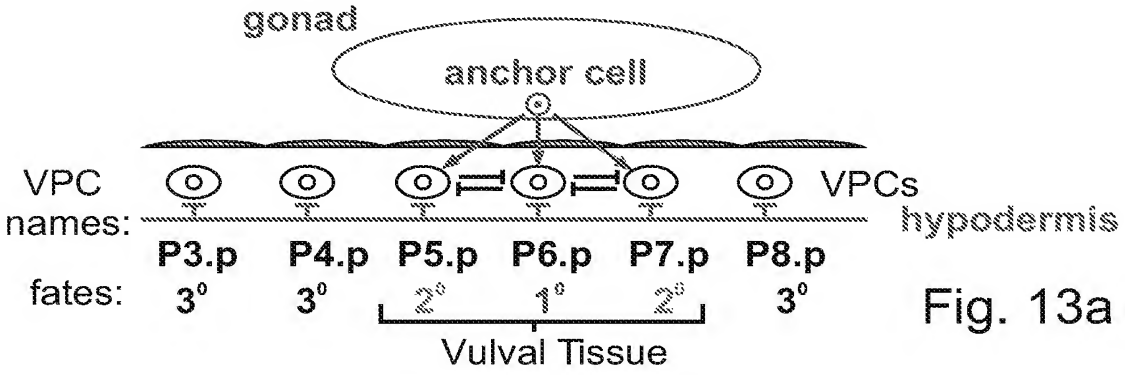


Fig. 13a

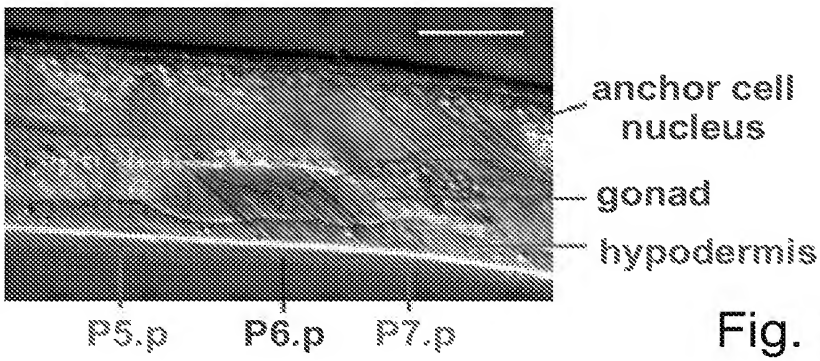


Fig. 13b